

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. **10/532,202**
Applicant(s): **STEFFEN HASENZAHN, ET AL.**
Filed: **April 14, 2005**
TC/A.U. **1796**
Examiner: **Peter F. Godenschwager**
Title: **PULVERULENT MATERIALS**

Confirmation No.: **6755**

Docket No.: **032301.415**
Customer No.: **25461**


MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SECOND DECLARATION UNDER 37 C.F.R. § 1.132

Jürgen Meyer, a co-inventor in the above-identified U.S. patent application hereby declares and states as follows:

I am a co-inventor in this application as shown by the corrected filing receipt mailed January 26, 2006, and ~~is~~ completely familiar with the subject matter of this application.

I have read the Advisory Action mailed January 6, 2010 which states that ^{my} ~~his~~ prior Declaration dated November 23, 2009 (filed Dec. 18, 2009) is insufficient to overcome the rejections of the claims in this application because : "The Declaration does not account for the broad interpretation of 'structurally modified' afforded by the instant specification to include the *molecular* structure modifications as taught by Ettlinger et al.... as the instant specification has not defined the term 'structurally modified' to exclude such *molecular* structure modifications".



The invention described in this application relates to pulverulent material and the use of surface- and structure-modified silicas to improve flowability. Pulverulent materials and their mixtures have a tendency to cake during prolonged storage, as mentioned in the published

application [0002]. The object of this invention was to prepare pulverulent mixtures that do not have this disadvantage and to provide pyrogenic silicas that act as flow regulators and anticaking agents in solids, as mentioned in the published application [0011].

As an expert in the technology relating to preparing pulverulent materials as described in my patent application as well as the preparation of silicas described in my European patent 0672731 which are used as thickeners, and having the benefit of many years of practical experience in this field of technology, it would be understood by a person having skill in this technology that the term "structure-modified" does not include "molecular structure modifications". Indeed, my U.S. patent application describes how structure-modification can be achieved in paragraph [0034]. No chemical or molecular treatment is disclosed that would result in any "molecular structure modifications". Therefore, I as a person skilled in this art would not consider that my U.S. patent application provides a "broad interpretation" of "structurally modified to include the silanized silicas" contrary to what is said in the Advisory Action.

My European patent EP0672⁷³¹~~771~~ which discloses the treatment of silicas with silanes is known in this technology as "surface modification" and not "molecular" structure modification. 1/10/95

Thus, the two types of modifications that are involved here are: (1) surface modification of silicas with silanes, also known as "silanizing", an example of which is found in my European '731 patent, and (2) structurally modified silicas as described in my U.S. patent application. My U.S. patent application claims silicas that are both silanized and structurally modified. The two concepts are quite distinct and are so recognized by persons having skill in this technology.

As the co-inventor in the European patent 0672731 which is cited in the U.S. Patent and Trademark Office against this application, I am completely familiar and knowledgeable with respect to the content of the European patent, as well as the above-identified U.S. patent

application having been intimately involved with the inventions described in each of those documents.

I can state without any qualifications whatsoever that the European patent EP 0672731 of which I am the co-inventor relates to surface modification of silicas with silanes to produce surface modified silicas known as silanized silicas and does not relate to a structurally modified silica and does not disclose a structurally modified silica and does not contemplate a composition containing a structurally-modified silica. Contrary to what is said in the Advisory Action, my European patent (Ettlinger) which discloses a chemical surface modification only, does not teach anything about "structure modifications" by mechanical action (e.g. by milling).

The term "molecular structure modification" as used in the Advisory Action has no meaning or relevance in the technology relating to the preparation of pulverulent materials having improved flowability and anticaking properties.

To show the difference between structure modified pyrogenic oxide (silica) and non-structure modified pyrogenic oxide (silica), I have attached hereto TEM microphotographs.

The difference is readily apparent from the enclosed photos. One set is in color and one set with English language translations is in black and white.

Accordingly, I am of the opinion that the Official Action wherein the U.S. Patent and Trademark Office takes the position that the European patent of *Ettlinger et al.* discloses a structurally modified silica is technically incorrect and is in error.

I, Jürgen Meyer, hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the

like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this declaration is directed.

Date: March 8, 2010


JÜRGEN MEYER